

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-6 (Canceled)

7. (Currently Amended) A mask having a mask pattern which comprises at least one diffraction structure for deflecting incident radiation in a plane comprising the a direction of periodicity of the diffraction structure and the a propagation direction of the incident radiation, wherein the at least one diffraction structure includes a first structure having strips of a first pitch ~~and a second structure having strips of a second pitch which is different from the first pitch~~ which is configured to deflect the incident radiation so that a deflected radiation is substantially concentrated in first order beams for simultaneously exposing surfaces in different planes of a substrate.

8. (Previously Presented) The mask of claim 7, wherein the diffraction structure is an amplitude structure.

9. (Previously Presented) The mask of claim 7, wherein the diffraction structure is a phase structure.

10. (Previously Presented) The mask of claim 9, wherein the phase structure has a duty cycle of 50% and a phase depth of  $180^\circ$ .

11. (Previously Presented) The mask of claim 7, wherein the diffraction structure is designed to deflect incident exposure radiation at an angle of substantially  $20^\circ$  to the normal to the grating surface.

12. (Previously Presented) The mask of claim 7, wherein the mask pattern comprises, next to a diffraction structure, mask features corresponding to substrate features to be configured in a substrate upper surface layer.

13. (Previously Presented) The mask of claim 7, layer the diffraction structure is a linear diffraction grating.

14. (Previously Presented) The mask of claim 7, layer the diffraction structure is a two-dimensional diffraction grating.

15. (Previously Presented) The mask of claim 7, layer the diffraction structure comprises a number of linear diffraction gratings, which each form a segment of a common circular area.

Claim 16 (Canceled)

17. (Currently Amended) A mask having a mask pattern which comprises at least one diffraction structure for deflecting incident radiation in a plane comprising ~~the a~~ direction of periodicity of the diffraction structure and ~~the a~~ propagation direction of the incident radiation, the diffraction structure corresponding to a substrate feature to be configured in a substrate side surface layer, wherein the at least one diffraction structure includes a first structure ~~having strips of a first pitch~~

~~and a second structure having strips of a second pitch which is~~  
different from the first pitch which is configured to deflect the  
incident radiation so that a deflected radiation is substantially  
concentrated in first order beams for simultaneously exposing  
surfaces in different planes of a substrate.

18.(New) The mask of claim 7, wherein the at least one diffraction structure includes a second structure having strips of a second pitch which is different from the first pitch.

19.(New) The mask of claim 7, wherein the different planes include two parallel planes.

20.(New) The mask of claim 7, wherein the different planes are mutually perpendicular.

21.(New) The mask of claim 7, wherein the at least one diffraction structure is configured to diffract the incident radiation in two mutually perpendicular directions so that end surfaces of the substrate extending both in an XZ plane and in a YZ

are exposed, when the incident radiation is in an XY plane.

22.(New) The mask of claim 7, wherein the first strips have a pitch, a duty cycle and an optical depth which are configured to form the first-order beams with higher intensity than intensities of zero-order and second-order beams.

23.(New) The mask of claim 17, wherein the at least one diffraction structure includes a second structure having strips of a second pitch which is different from the first pitch.

24.(New) The mask of claim 17, wherein the different planes include two parallel planes.

25.(New) The mask of claim 17, wherein the different planes are mutually perpendicular.

26.(New) The mask of claim 17, wherein the at least one diffraction structure is configured to diffract the incident radiation in two mutually perpendicular directions so that end

surfaces of the substrate extending both in an XZ plane and in a YZ plane are exposed, when the incident radiation is in an XY plane.

27. (New) The mask of claim 17, wherein the first strips have a pitch, a duty cycle and an optical depth which are configured to form the first-order beams with higher intensity than intensities of zero-order and second-order beams.